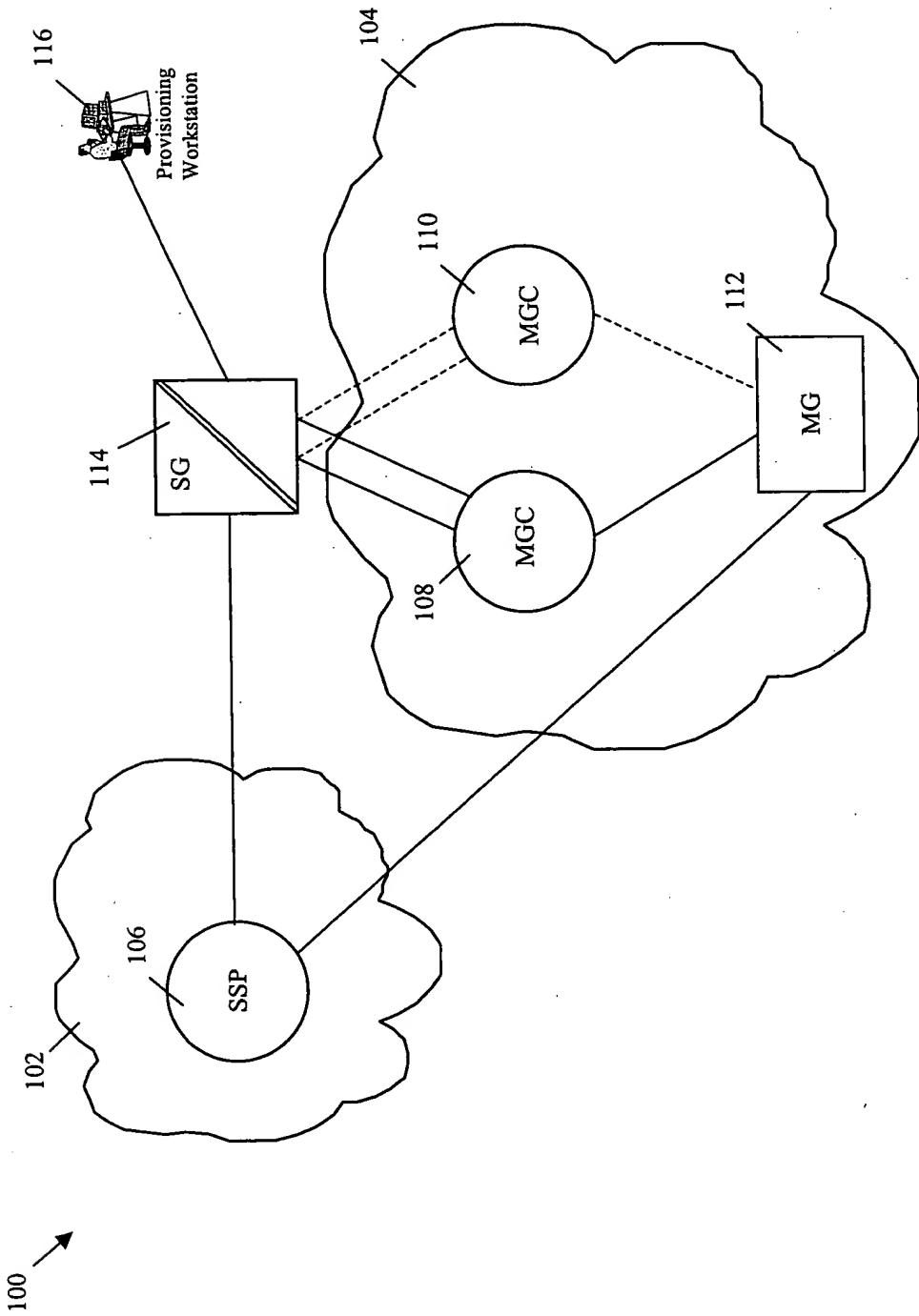


Title: Methods and Systems for Providing Dynamic Routing  
Key Registration  
Inventor(s): Davidson et al.  
Docket No.: 1322/45/2



PRIOR ART

Figure 1

Title: Methods and Systems for Providing Dynamic Routing  
Key Registration  
Inventor(s): Davidson et al.  
Docket No.: 1322/45/2

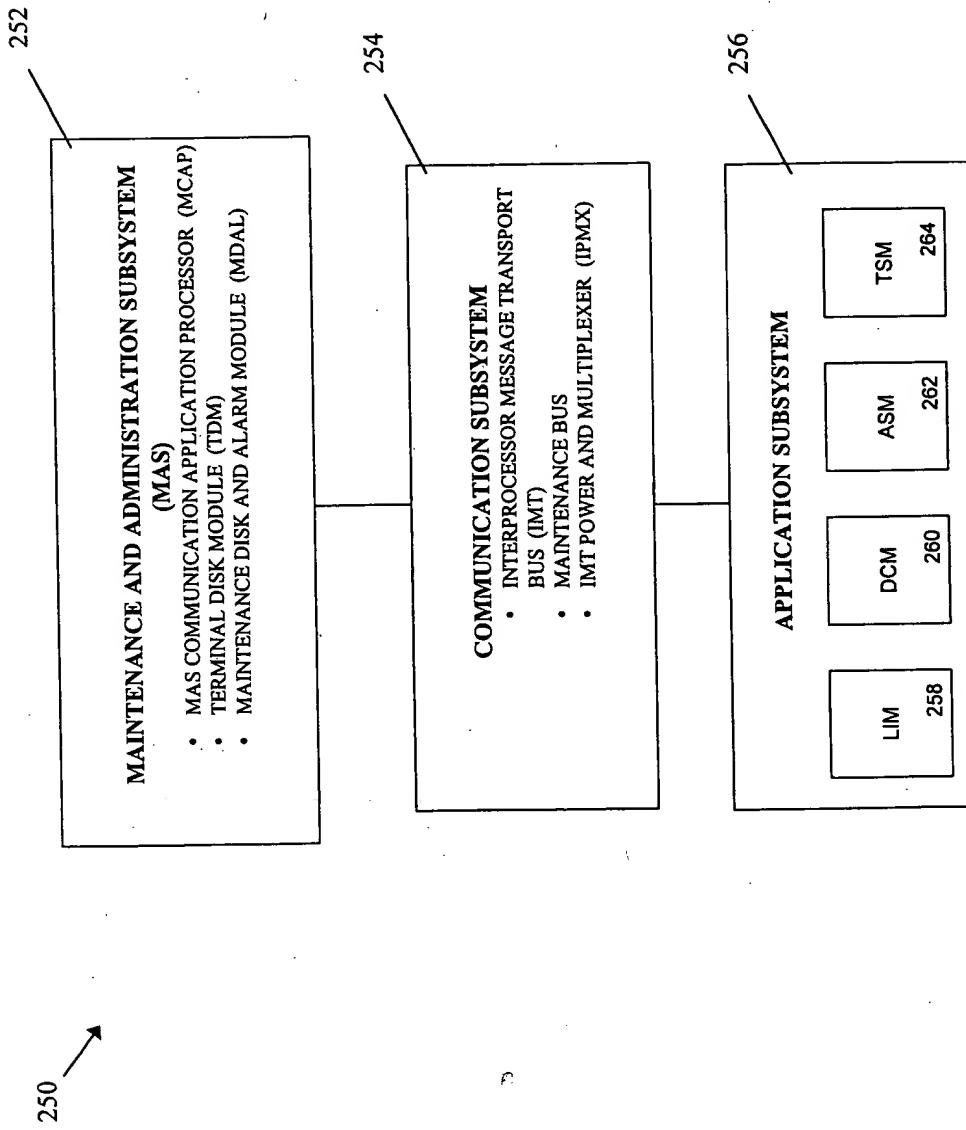


Figure 2

PRIOR ART

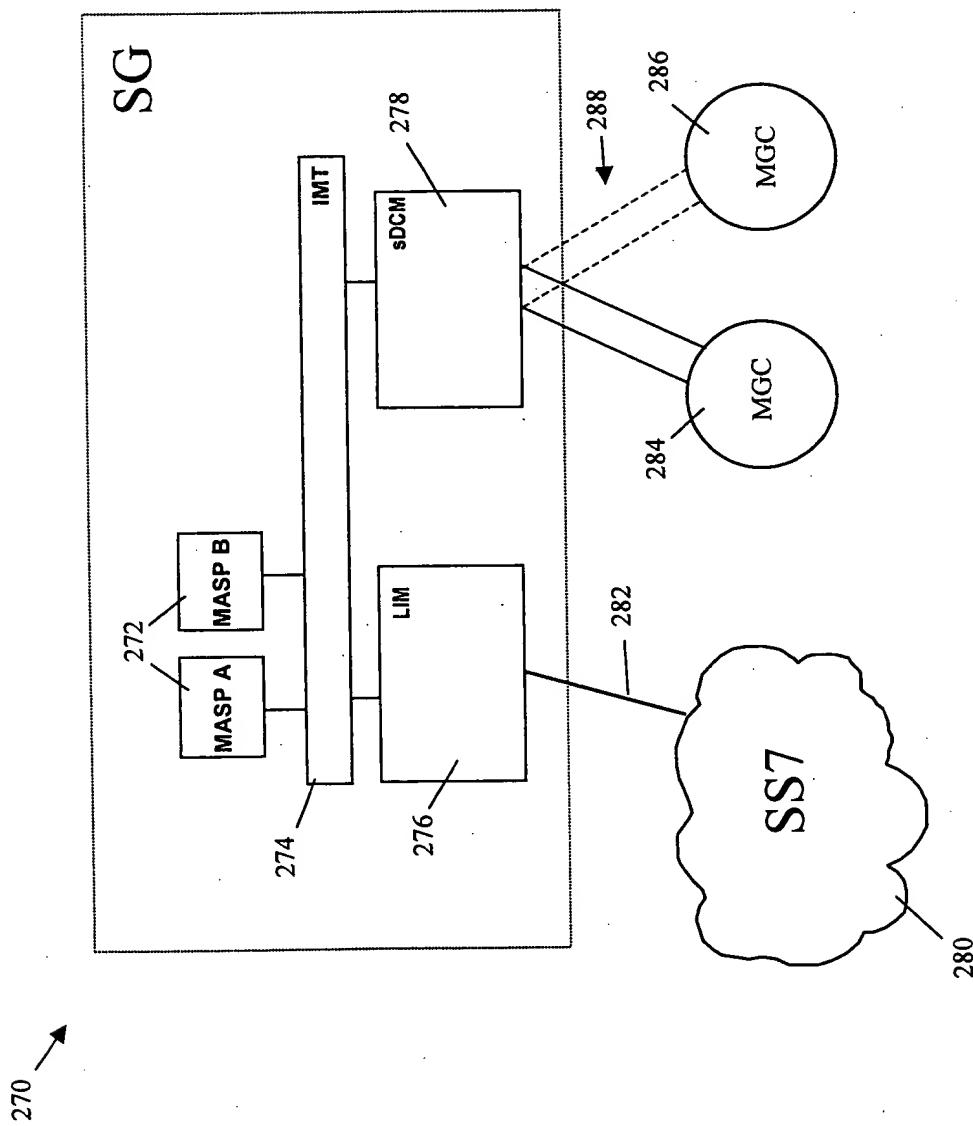


Figure 3

Title: Methods and Systems for Providing Dynamic Routing  
Key Registration  
Inventor(s): Davidson et al.  
Docket No.: 1322/45/2

### TALI Registration Message Diagram

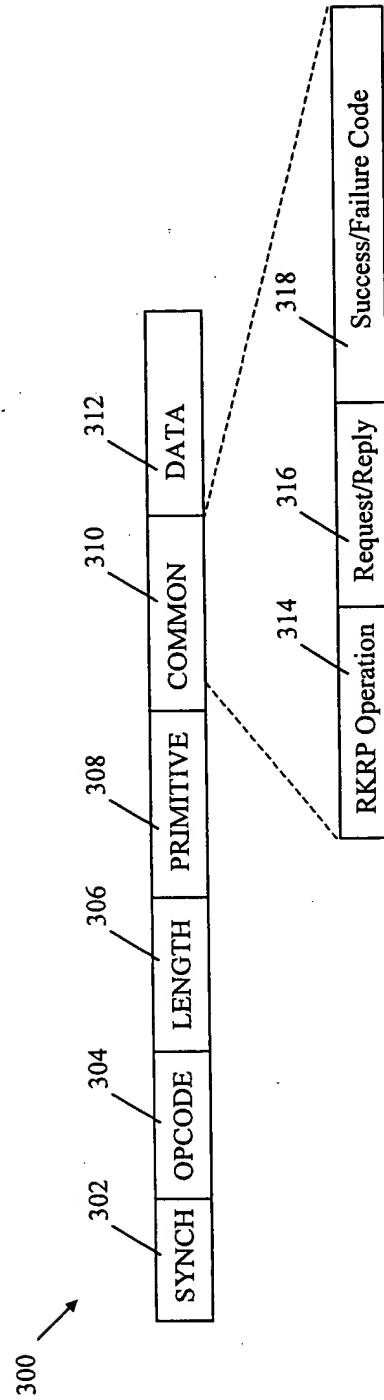


Figure 4

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### Routing Key Specific Data

Routing Key Type	Common	RKRP Flags	SI	DPC	OPC	CICS	SPLIT	NCICS	NCICE	SSN
CIC Based	x	x	x	x	x	x	x	x	x	x
SCCP Based	x	x	x	x	x					x
DPC - SI - OPC	x	x	x	x	x	x				
DPC - SI - *	x	x	x	x	x	x				
DPC - * - *	x	x	x	x	x	x				
* - SI - *	x	x	x	x	x	x				
* (Default)	x	x								

Additional Registration Message Fields

Figure 5

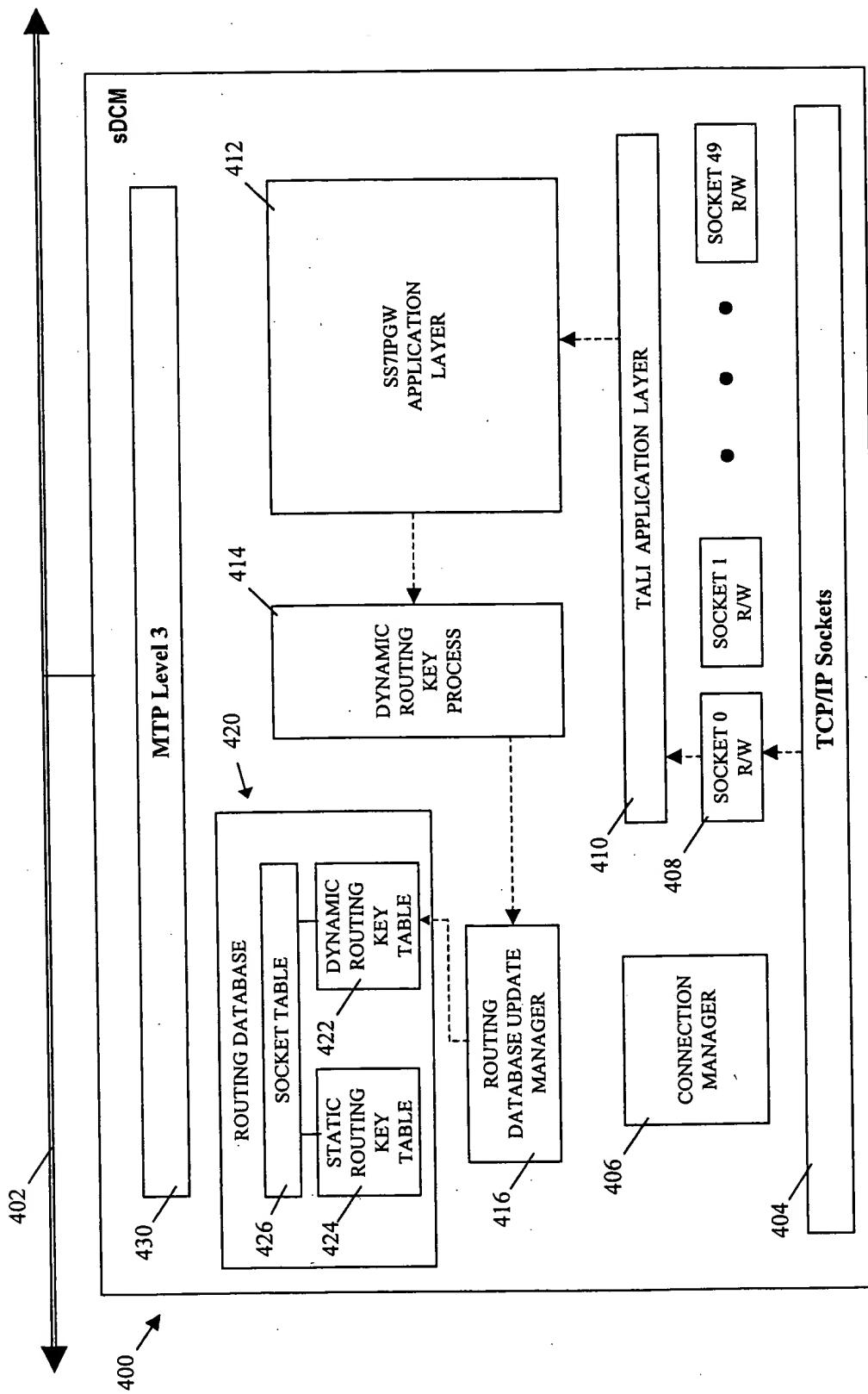


Figure 6

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Key Registration  
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Dynamic Routing Key Table

		DATA									
		KEY(s)									
DPC	OPC	450	452	454	456	458	460	462	464	466	468
3-1-1	6-1-1	/	/	/	/	/	/	/	/	/	SOCKET
3-1-2	6-1-1	3	-	-	-	-	-	-	-	-	ID
3-1-3	6-1-1	3	-	-	-	-	-	-	-	-	Sock1
1-1-1	6-1-1	3	-	-	-	-	-	-	-	-	Sock2
1-1-2	7-1-1	5	25	28	-	-	-	-	-	-	Sock3
1-1-3	6-1-1	5	12	13	-	-	-	-	-	-	Sock4
											Sock5
											Sock6

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Figure 7

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Socket Table						
KEY	DATA					
Socket ID	IP Address	Local TCP Port	Distant IP Address	TCP Port	Socket Status	
480	10.10.10.10	24	10.10.10.1	24	A	486 /
Sock1	10.10.10.10	42	10.10.10.1	42	A	
Sock2	10.10.10.10	12	10.10.10.1	12	A	
Sock3	10.10.10.10	54	10.10.20.1	54	A	
Sock4	10.10.10.10	16	10.10.20.1	16	A	
Sock5	10.10.10.10	76	10.10.20.1	17	U	
Sock6	10.10.10.10					

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Figure 8

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Return Code	SI / checked	Type of requests	Description
1	all	all	Transaction successfully completed.
2	all	all	Length of TAI message is insufficient to contain all required information for 'tkrp' operation.
3	N/A	all	Unsupported 'tkrp' operation
4	all	all	Invalid SI. SI must be in range 0..15
5	all	all	Invalid SI/opcode combination. Split and resize only supported for SI=5. Enter, delete and override supported for all SI.
6	all	all	Invalid DPC. Point code cannot be zero, and type must be ANSI.
7	3	all with SI=3	Invalid SSN. SSN must be in range 0..255.
8	5	all with SI=5	Invalid OPC. Point code cannot be zero, and type must be ANSI.
9	5	all with SI=5	Invalid CICS. Must be in range 0..16383.
10	5	all with SI=5	Invalid CICE. Must be in range 0..16383.
11	5	all with SI=5	Invalid CIC range. CICCS must be less than or equal to CICE. On a split operation, CICCS must be strictly less than CICE (cannot split an range with only one entry).
12	5	resize	Invalid NCICS. Must be in range 0..16383.
13	5	resize	Invalid NCICE. Must be in range 0..16383.
14	5	resize	Invalid new CIC range. NCICCS must be less than or equal to NCICE.
15	5	split	Invalid SPLT value. Must be in range 0..16383. Must be greater than CICS and less than or equal to CICE.
16	all, 5	enter, split	No free entries in table.
17	5	enter, override	CIC range overlaps but does not match existing entry.
18	all	enter	Entry already has 16 associations.
19	5	resize, split, override	Entry to be changed not found in table.
20	5	resize	New entry would overlap another entry (allowed to overlap the entry being changed, but no others).
21	all	delete	Entry to be deleted not found in table.

Figure 9

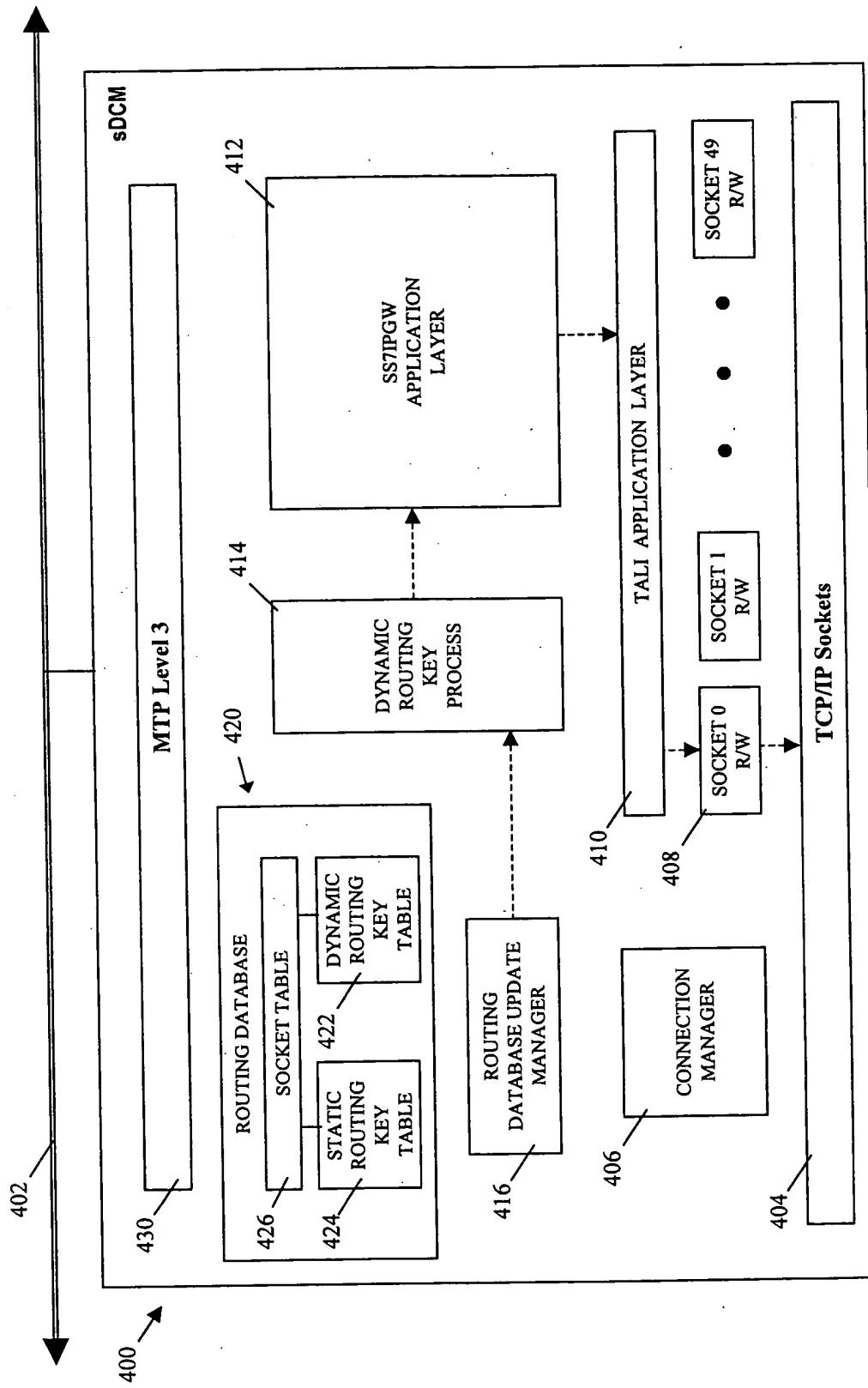


Figure 10

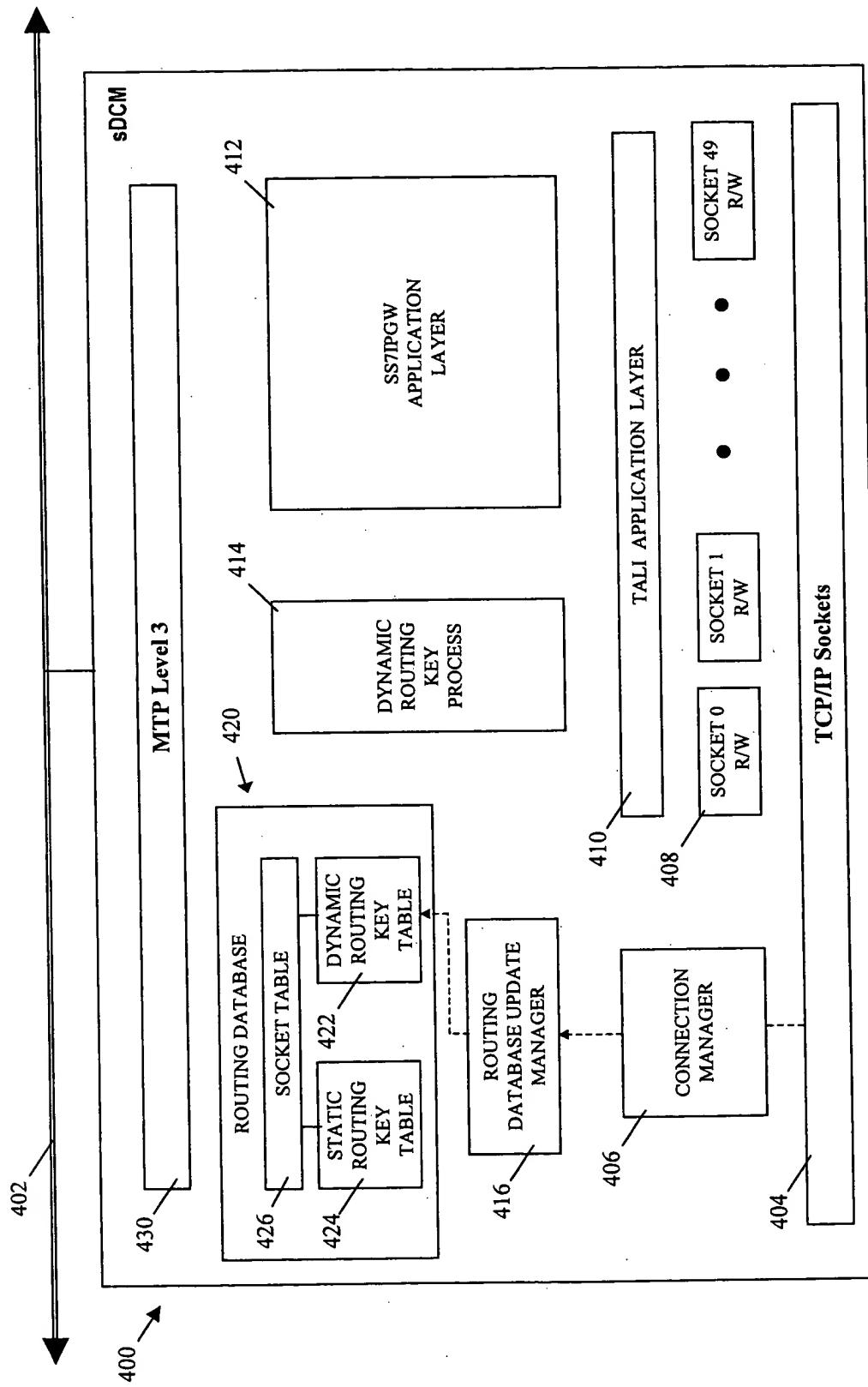


Figure 11

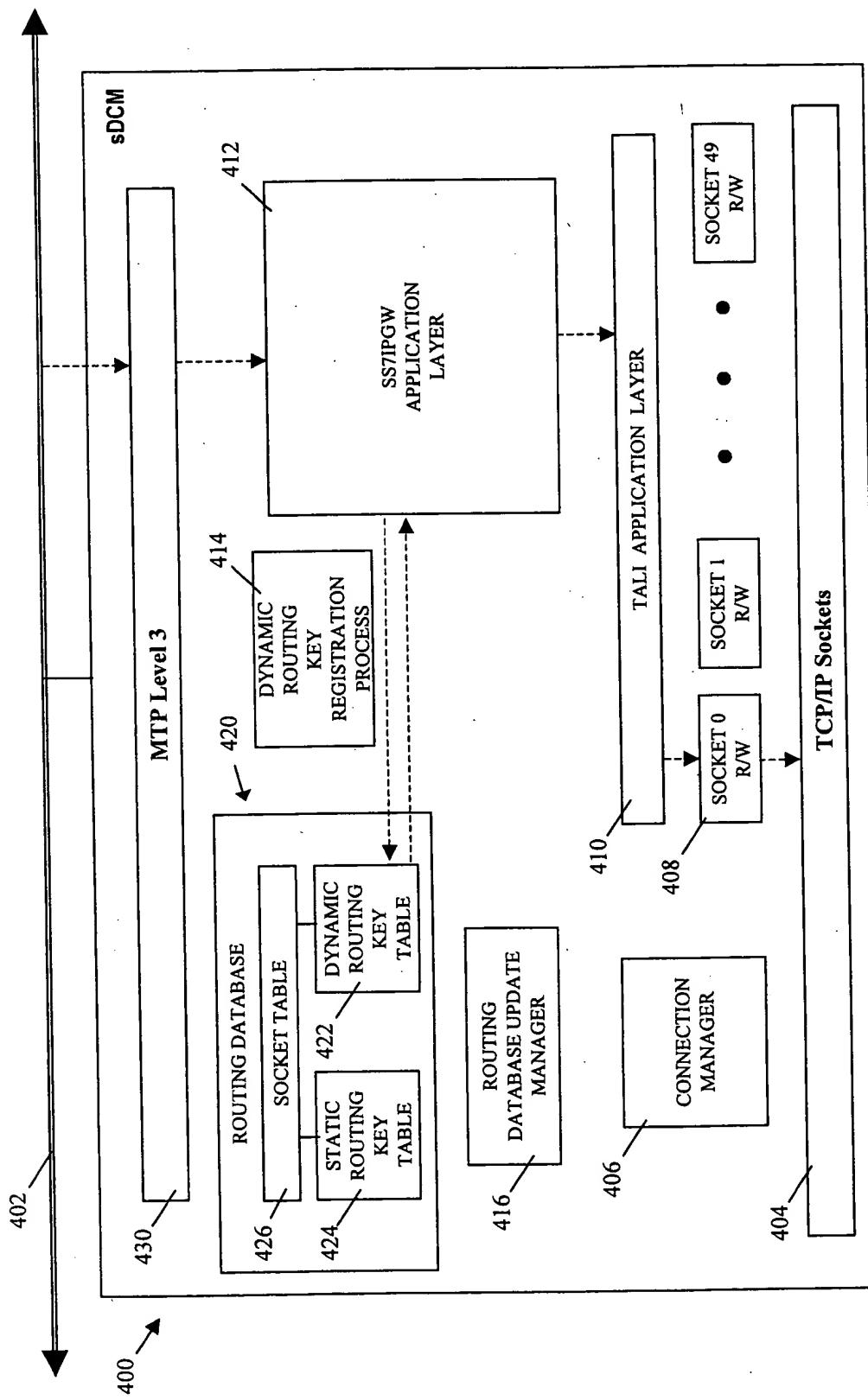


Figure 12

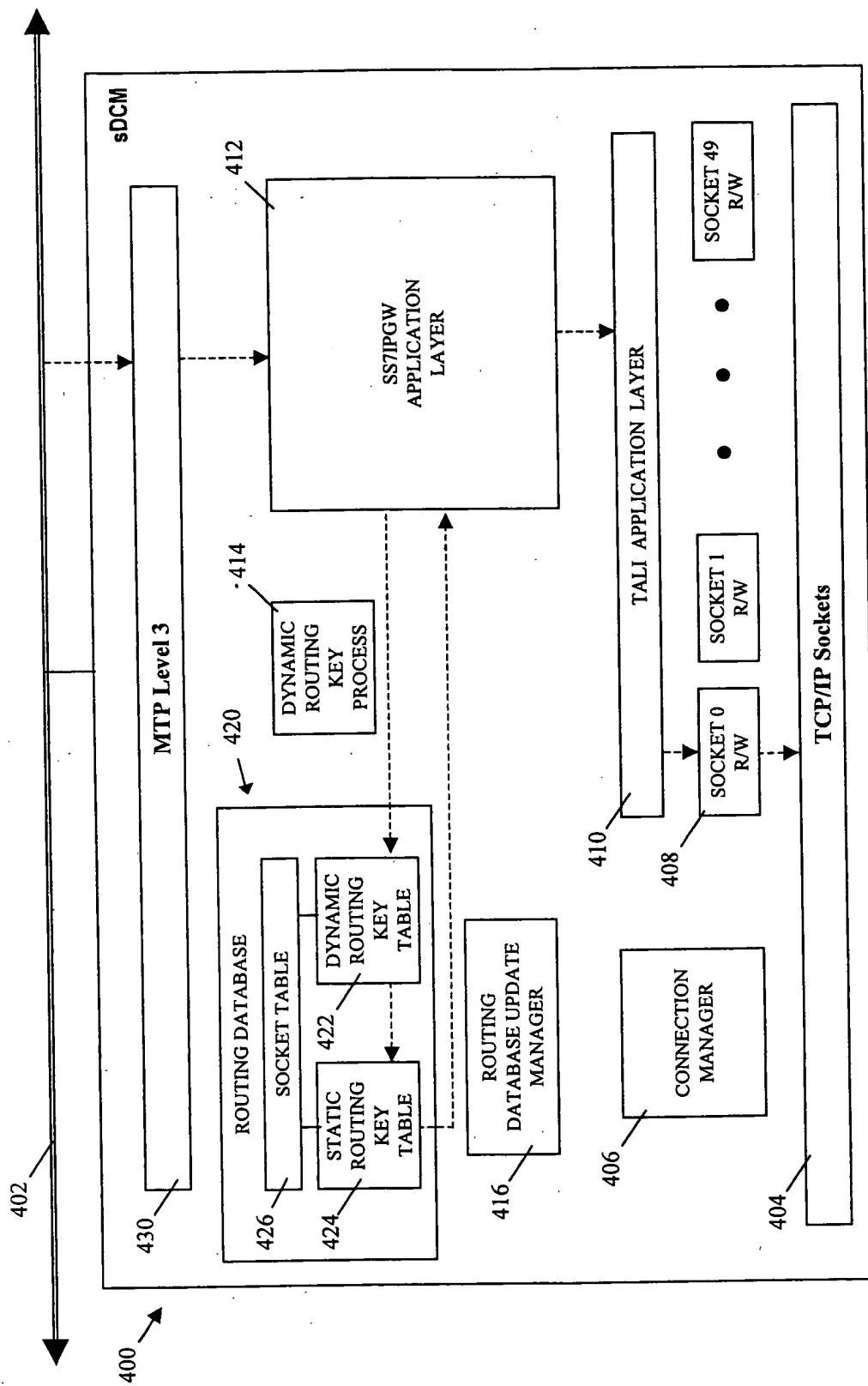


Figure 13

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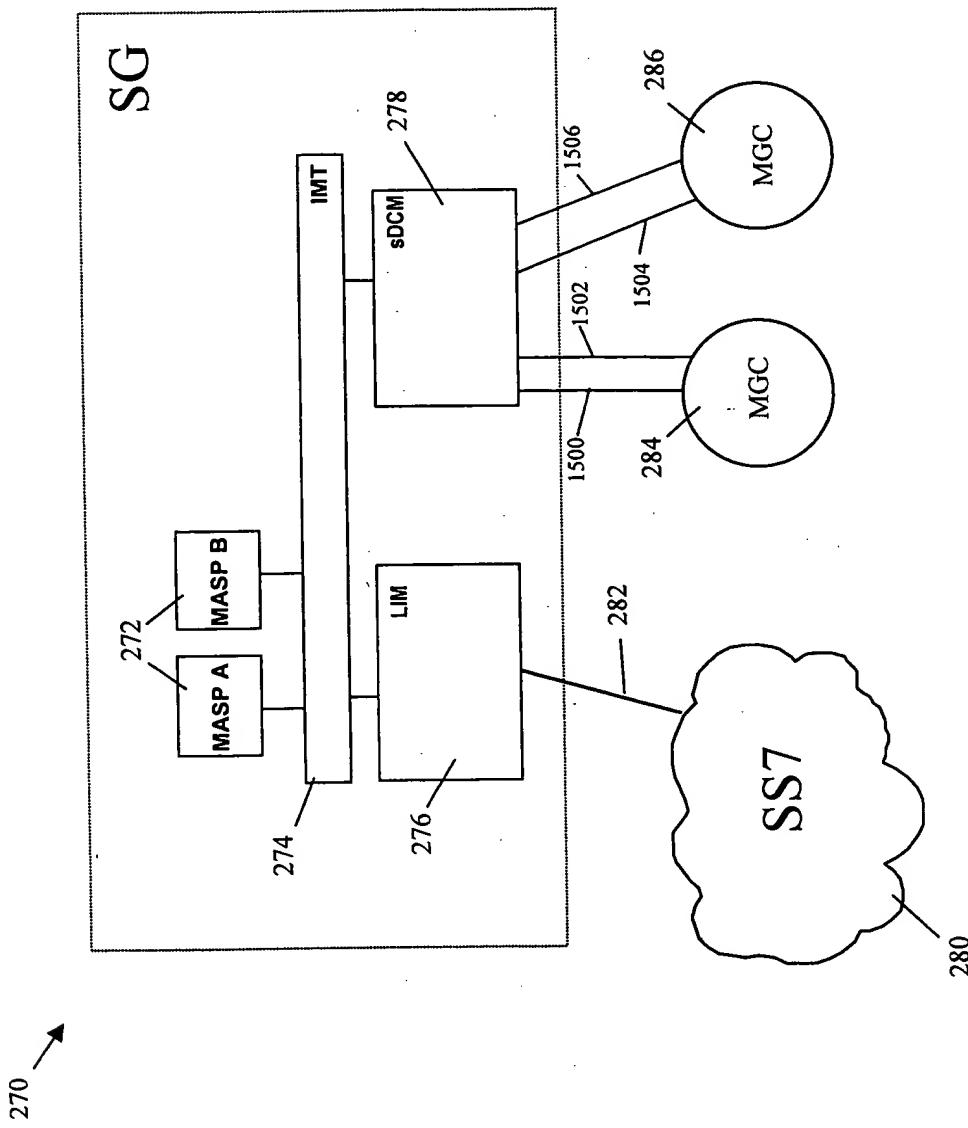


Figure 15

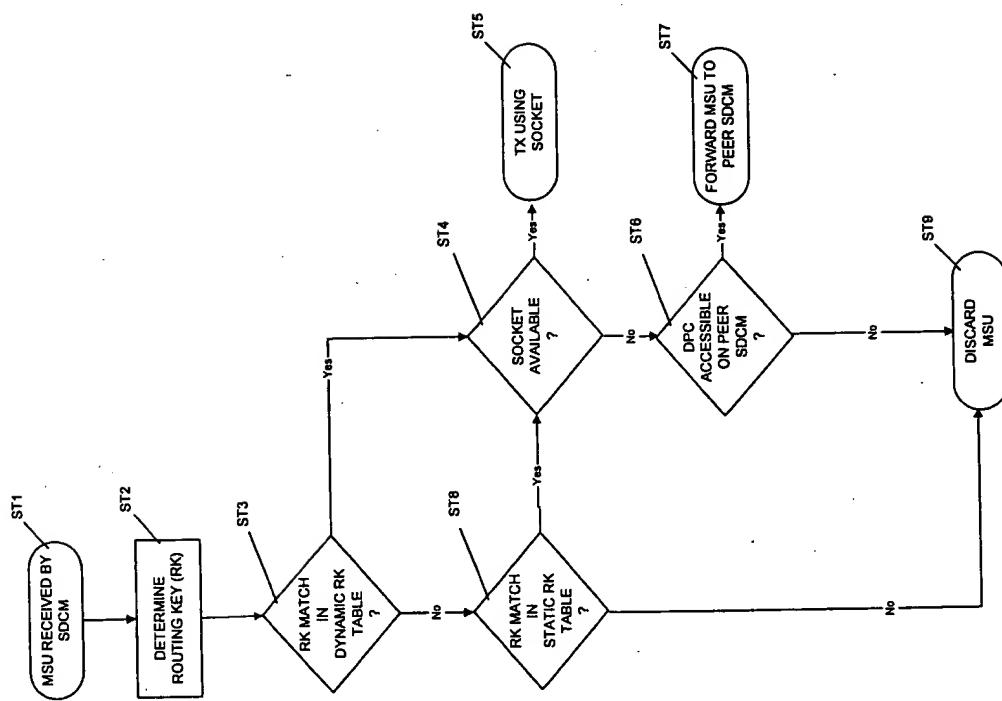


Figure 14